

# Managing for Excellence Concept Paper

# Functional Area: Research and Laboratory Services

Executive Sponsor

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# **Background/Drivers**

In the early 2000's, Reclamation instituted an agency-wide, cost-sharing, competition-based internal Research and Development (R&D) program. R&D funds are currently awarded based upon established Bureau-wide schedules, priorities, and peer review processes. The agency will invest in R&D consistent with core mission priorities and to address key emerging scientific and technical challenges.

The R&D Office is managed by a Director of R&D, consistent with the administration's R&D Investment Criteria. A Science and Technology (S&T) Program Steering Committee provides advice on priority areas. The Steering Committee has membership from throughout the agency as well as from other agencies, universities, and water districts. In addition, Regional Research Coordinators and reviewers throughout Reclamation provide recommendations relative to specific research proposals.

The R&D Office does not manage the laboratory services. Historically, technical capabilities and laboratories were both located within the Division of Research. However, when the Denver organization was changed from the Engineering and Research Center to the Technical Service Center (TSC), that relationship changed. Currently, programmatic responsibility for these two activities is lodged separately, with research managed by the Office of Science and Technology and the laboratory facilities managed by the TSC. There are also a few labs located within some regional and area offices. However, these action items have been grouped together and will examine further improvements to the R&D funding process, as well as the most effective way to obtain Reclamation's laboratory services needs.

# Improvements to R&D Process

The team responsible for Action Items 34-35 has two objectives. The first is to evaluate, and either redefine or validate the Steering Committee's role in seeing that Reclamation's mission related R&D needs are met. The second objective is to formulate a plan to accomplish PART goals for R&D, which are: (1) produce a 10:1 return on investment, (2) increase non-Reclamation cost-sharing, and (3) improve technology/information transfer.

The team has prepared a report on its evaluation and conclusions, and has recommended that tasks 34 & 35 be combined into one task with one report since both objectives deal with the singular goal of continued improvement of the research program. The team will give an overview of its activities at Reclamation's public meeting in September.

# Sizing, Location, and/or Outsourcing of Lab Services

The team responsible for Action Items 32-33 is engaged in identifying the scope of current lab services being performed within Reclamation as well as the agency's current and future needs for these services. This will be accomplished by examining the current funding sources/business models for these labs. Data has been collected and a draft report is being prepared for review. An update based on this information will be given at Reclamation's public meeting in Salt Lake City September 19-20.

Based on the understanding gained regarding the workload, infrastructure costs, and potential for outsourcing, as well as the role of Reclamation's specialized labs in maintaining core capabilities within the agency, the team will then propose opportunities for retaining, consolidating, eliminating, and or outsourcing each of these labs. These proposals will be made with the aim of supporting the design, research, planning, estimating and construction management activities critical to the success of Reclamation's mission in the most efficient manner possible. An implementation plan will be developed to achieve the appropriate resource staffing levels and distribution of lab services within Reclamation. Interested stakeholders are encouraged to provide input to this process at Reclamation's future public meetings and via the *Managing for Excellence* website. For an outline of the objectives, tasks, and milestones for Team 32-33, please see the attached Action Item Summary.

# **Relationship to other Functional Areas**

The recommendations from Team 32-33 regarding sizing, location, and/or outsourcing of Reclamation's laboratory services will be a direct input into the rightsizing process being accomplished by the teams responsible for Action Items 9-12 in the Engineering and Design Services area. Stakeholders interested in the rightsizing process are encouraged to give input to the work of Team 32-33.

#### **Action Item 32**

Determine where opportunities exist for use of federal and non-federal lab services.

#### **Action Item 33**

Determine where opportunities exist for retaining, consolidating and/or eliminating lab services within the TSC and regions.

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#### **Team Members:**

- Monte McClendon, Ecosystems Analysis Program Manager, Pacific Northwest Region
- Pablo Arroyave, Deputy Area Manager, Lahontan Basin Area Office, Mid-Pacific Region
- Mike Norris, Research Coordinator, Yuma Area Office, Lower Colorado Region
- Angela Adams, Yuma Area Office, Lower Colorado Region
- Tom Luebke, Business Manager, Technical Service Center
- Nathan Myers, Electrical Engineer, Hydroelectric Research and Technical Services Group, Technical Service Center
- Bill Kepler, Materials Engineering and Research Laboratory Group, Technical Service Center
- Tony Wahl (support), Hydraulic Engineer, Water Resources Research Laboratory, Technical Service Center
- John LaBoon, Manager, Waterways and Concrete Dams Group, Technical Service Center

#### **Objectives:**

- Identify existing Reclamation lab services, the scope of current lab services being performed, and clients for those services
- Propose opportunities for retaining, consolidating, eliminating, and or outsourcing lab services in a manner that most effectively supports the design, research, planning, cost estimating and construction management activities critical to the success of Reclamation's mission. An implementation plan will be developed to achieve the appropriate resource staffing levels and distribution of lab services within Reclamation

#### Tasks:

- Depict the current array of lab services in terms of:
  - Purpose Design support, Infrastructure O&M Support, Applied Research, Operational Decision Support
  - Capability (e.g. hydraulic modeling, environmental services, rock mechanics, water quality analysis, GIS, electrical infrastructure services, material engineering services)
  - o Infrastructure costs
  - Location of lab service provider (e.g. UC Region, Great Plains Region, TSC, IDIQ contract, etc.)

#### Action Items 32-33 (cont.)

### Tasks (cont.):

- Depict the current workload profile (based on past 3 years) for each lab service identified above:
  - Customer (e.g. UC Power Program, Dam Safety Program, Research Program, Area Office, Regional Office, Non-Reclamation, etc.)
  - Activity Based Costing category
- Adjust the workload profile to depict the future anticipated workload
- Identify potential non-Reclamation sources for each lab service
- Estimate the number of technical staff required to maintain each core capability to provide/obtain lab services
- Determine the most effective combination of in-house lab services (additional to that required to maintain core capabilities) and outsourcing to accomplish projected workload
- Propose alternatives for the most effective distribution of in-house lab services within Reclamation
- Propose an implementation plan to achieve the appropriate resource staffing levels and distribution of lab services within the agency

#### Milestones:

- July 2006: Interface with the stakeholders at this point in the process to give them the
  opportunity to identify whether or not the data are appropriate from their perspective.
- August 2006: Inventory of potential non-Reclamation laboratory service providers.
- September 2006: Interface with the stakeholders to give them the opportunity to provide input to the team prior to firming up recommendations.
- November 2006: Develop implementation plan
- December 2006: Submit implementation plan for review and approval

#### **Products:**

- Final report detailing proposals for lab services to be outsourced vs. retained in-house, and the appropriate distribution within Reclamation.
- Implementation Plan